

# The Tundra Times Indexing Project

## 2. Abstract

The Arctic Slope Regional Corporation, a for-profit regional Native corporation with headquarters in Barrow, Alaska, proposes to implement the Tundra Times Indexing Project. Funding for this project in the amount of \$149,964 is being requested from the Institute of Museum and Library Services' Enhancement Grant. This application is supported by the eight councils of the Iñupiat Eskimo communities of the North Slope Borough of Alaska: Naqragmiut Tribal Council (Anaktuvuk Pass), Native Village of Atkasuk, Native Village of Barrow, Kaktovik Village of Barter Island, Native Village of Nuiqsut, Native Village of Point Hope, Native Village of Point Lay, and the Wainwright Traditional Council. This project is consistent with the communities' vision of the ongoing educational, technological and cultural efforts currently under way on the North Slope.

The primary goal of this project is to provide the people of the North Slope, as well as Alaska Natives and researchers in Alaska and beyond, with access to the articles which appeared in the Tundra Times newspaper over a 35-year period from 1962 to 1997. This important resource which documents the history of Alaska Natives and their pivotal political struggles during this period of intense change has never been indexed. The project will additionally enhance the ongoing projects being conducted by the Tuzzy Consortium Library to digitize the entire photograph collection of the newspaper, the North Slope Borough School District to develop an Alaska Native history curriculum, and the University of Alaska to expand the coverage of their Alaska Periodicals Index.

The project objectives are to digitize the microfilm of the 35-year run of the weekly Tundra Times newspaper, create a full text index to the articles with links to the scanned newspaper images, to provide the Alaska Periodicals Index with 3000 indexing records, and to develop local talent in advanced library technology issues. The Library will capitalize on existing technology to accomplish these objectives and will do so in the environment of a small, remote library. Training for staff in the most current indexing techniques, support from a consultant and from the Alaska State Library and Rasmuson Library at the University of Alaska Fairbanks will guide Library staff to achieve and maintain nationally recognized standards for access to digital collections and newspaper indexing.

On behalf of the Arctic Slope Regional Corporation, the Tuzzy Consortium Library of Iñisaġvik College in Barrow will provide leadership and management for this project. The Library Director will serve as the project director. The Library Archivist will be responsible for day-to-day project operations. A technician will be hired using project funding to perform the necessary work. The Library along with its partners, the Ukpeagvik Iñupiat Corporation, the Iñupiat Heritage Center, the North Slope Borough's Iñupiat History, Language and Culture Commission and the University of Alaska Fairbanks will provide project oversight. Each organization has expertise in indexing or project development and has expressed great interest in working with the Library. They will assist and advise the Library in managing the project and seeing it through to completion.

### 3. Narrative

The Tundra Times was the voice of Alaska Natives statewide from 1962 to 1997. At the time, the idea of a newspaper written by and for Alaska Natives was audacious. In the early 1960s, the state's indigenous residents were a disenfranchised people. With its first edition, the eight-page biweekly established a fascinating mix of articles ranging from politics and Native issues to Native life. From the beginning, the paper sought to unify Natives. "Tundra," the basic ground cover of Alaska was chosen as its name. The masthead, designed by editor Howard Rock, an Iñupiat Eskimo from Point Hope, incorporated Eskimo, Indian and Aleut scenes that were flanked with "Iñupiat Paitot" (the people's heritage) in Iñupiat and "Dena Nena Henash" (the land speaks) in Athabascan. The paper's editorial policy was two-fold: to serve as the "medium to aid (Natives) in their struggle for just determination and settlement of their enormous problems . . . (and) to keep informed on matters of interest to all Natives of Alaska."

During its 35 years of publication, the Tundra Times reported on events that transformed the Native way of life, including settlement of land claims, founding of Native corporations, and the transfer of health and social services to Native-operated nonprofit corporations. Writing about the Tundra Times' place in history, Rock reported:

When we came off the press for the first time over five years ago . . . the Native people were dead spiritually, it seemed, because no news media would publicize their tragic situations and their problems. The Tundra Times, more than anything else, I think, has awakened the fervor to do something and help to bring out the potential in leadership among our people.

In 1997, the Tundra Times ceased publication. The Ukpeagvik Iñupiat Corporation (UIC) of Barrow acquired its archives and copyrights (attachment A), including over 120 boxes of print material as well as a photograph collection that consisted of over 15,000 black and white prints. A year later, the collection was placed in the care of the Tuzzy Consortium Library. The Library, through previous support from the Institute of Museum and Library Services (IMLS) has digitized many of the photographs and made them available to the public through its website (<http://tundratimes.ilisagvik.cc/>).

This year, 2002, is the 30th anniversary of the Alaska Native Claims Settlement Act (ANCSA) and the 40th anniversary of the founding of the Tundra Times. Preparations are underway statewide to celebrate these seminal events of the 20th Century for Alaska Natives. It is quite timely that during this celebratory year, a project to index the Tundra Times newspaper should finally be initiated and the articles made available on the Internet.

#### A. Statement of Need

The Tuzzy Consortium Library was honored when a collection as important as the Tundra Times archives came into its charge. With this honor came the burden to preserve and share the information with the other Native communities in the region and the state. Progress has been steady as the photographs were extracted from the collection, preservation measures applied and the photos digitized. This first phase of the plan is nearly complete. The second and more crucial phase, that of indexing the newspaper articles and matching the photographs with their captions and dates of publication, needs to begin. This phase will not only work to advance the previous phase, but also put the valuable information in the newspaper itself into the hands of the public for the first time. Although much of the hardware and software for such a project are already in place, personnel and expertise are needed. The Library's budget does not support the hiring of a technician to perform the work nor a consultant to train and guide the staff. It is only through the generosity of granting agencies like IMLS that this project can hope to proceed in a timely and expert manner.

##### A.1. Description of the Community

The Tuzzy Consortium Library (hereafter "the Library") serves as the academic library for Iñisagvik College and the public library for the North Slope Borough (NSB) of Alaska. Bordered in the north

by the Arctic Ocean and in the south by the Brooks Range, the NSB is the northernmost organized municipality in the United States, lying entirely above the Arctic Circle. Treeless, lowland tundra dotted by marshes, small lakes, meandering streams, and rivers dominate this vast area, which is roughly equal in size to the state of Minnesota. Iñupiat Eskimos have lived in the region for thousands of years, their survival dependent on their ability to draw sustenance from the land and the sea.

Approximately 8,000 people live in the NSB. Barrow, the largest town with 4,641 residents, is 53% Iñupiat. Other North Slope communities are more than 92% Iñupiat. Point Hope, population 805, is the largest, followed by Wainwright, 649; Nuiqsut, 420; Anaktuvuk Pass, 314; Kaktovik, 256; Point Lay, 246; and Atkasuk, 224. Distances between villages are great and none are accessible by road. Point Hope on the west is 650 miles from Kaktovik on the east, and 400 miles northwest of Anaktuvuk Pass. (Attachment A.)

Because of the remoteness of the North Slope, material goods common and inexpensive in the rest of the United States are rare and dear. The price of a gallon of milk is \$7.00 and a gallon of gas is \$3.14. In general, the cost of living is twice as high as in the Lower 48. The cost of hiring a technician to perform the work for this project may sound unreasonably high, but by arctic standards, it is just a bit above minimum wage.

## **A.2. Current Status of the Library**

Iñsaḡvik College is a two-year institution located in Barrow. The College is an independent, public, nonprofit post-secondary school, established in 1986 in a cooperative agreement between the University of Alaska Fairbanks (UAF) and the NSB, as an extension of UAF. Coming into its own as a nonprofit institution in 1996, the College is currently a candidate for accreditation by the Northwest Association of Schools and Colleges, a process that it expects to complete by 2003. Governance of the public library system is through Iñsaḡvik College.

The Library is headquartered in Barrow, with seven outlying branches serving the other villages. The branches also function as the school libraries during the day. The village community libraries' small collections contain popular fiction, periodicals, general reference materials, culturally appropriate books and Internet connections to periodical databases. Village residents needing access to a more diverse library collection can receive materials through interlibrary loan. The Library is a member of OCLC, the largest library network in the world.

More than 90% of the bibliographic resources contained within the Library are housed in the facility at the Iñupiat Heritage Center in Barrow. The Library contains about 40,000 books and subscribes to 125 periodicals. Nine workstations connected to the Internet are available free of charge to the public. Special collections include a growing Alaskan section with particular emphasis on arctic and polar regions, the North Slope of Alaska and Iñupiat history, language and culture. Reversing the exploitation of the area's rich cultural heritage by institutions outside the region is among the Library's major goals. This can be accomplished by strengthening its capacity to preserve and disseminate collections such as the Tundra Times archives.

## **A.3. Improvement of Library Services**

With funding from IMLS, the Tundra Times Indexing Project (TTIP) will improve library services by making the Tundra Times articles accessible to the public, students, and scholars, both in the North Slope Borough and, via the College's Web site, throughout the nation. The newspaper has been microfilmed by the state library and is held in most larger libraries throughout the state. However, this valuable resource is not indexed and therefore, rarely used. Development of a project of this sophistication in Barrow is consistent with the Library's mission as a circumpolar resource and clearinghouse for information on the arctic, its people, and culture. In addition, TTIP will build the Library's capacity to complete similar projects by training staff in indexing and digitizing as well as by supporting project management skills.

## **A.4. Impact on the Community from Improved Library Services**

Perpetuating and strengthening Iñupiat culture, language, values and traditions - much damaged in the 19th and 20th centuries - is central to the Library's mission. Development of the Tundra Times index as a resource for the public, students, and researchers will impact on the community by making this previously unavailable historical treasure accessible and creating a greater understanding of events that continue to shape the lives of Alaska Natives. The index of articles

will enhance the Library's growing Alaskan collection, benefiting the NSB communities and the larger audience outside the region.

## **B. Project Description**

The Tundra Times Indexing Project is designed to digitize the microfilm of the Tundra Times newspaper, index the articles in the collection, and to make the index and newspaper images available to the Native communities of the North Slope and the entire State of Alaska over the Internet.

### **B.1. Goals and Objectives**

The primary goal of this project is to provide access to the articles of the Tundra Times newspaper for the Iñupiat people of the North Slope Borough and to the other Native people and villages of Alaska in order to more widely share this valuable resource.

There are five main objectives of this project:

- 1) To provide training and educational opportunities to project staff
- 2) To digitize the entire run of the newspaper from the 25 rolls of microfilm
- 3) To compile a full text index from the scanned microfilm
- 4) To disseminate the articles through the Internet
- 5) To provide indexing for the 3,000 most important articles to the Alaska Periodicals Index
- 6) To contribute additional indexing to the Tundra Times Photograph project currently underway

### **B.2. Approach for Accomplishing Project Goals**

The approach to the project goals will be comprehensive and systematic. Pre-funding preparations are already underway and will continue through the fall. The project workflow has been carefully researched and laid out. Follow-up activities are part of the long-range plan.

#### ***Preparations***

When UIC acquired the Tundra Times archives in 1997, it also obtained, "associated copyrights, trademarks and service marks . . . including but not limited to, any and all articles and photos appearing in the Tundra Times newspaper and all personal journals or other writings of Howard Rock . . ." (Attachment B) For purposes of this project, the Library obtained permission from UIC, after consultations with their counsel, to digitize the microfilm, index the articles, and disseminate the articles as described in this proposal.

With completion of the Iñupiat Heritage Center in August 1998, the Library gained office and workspace for an archivist and assistant that will serve as the workspace for this project. The Tundra Times collection is stored nearby in the secure and temperature-controlled rare book room. The work area of the project is equipped with computers that are clients on the College LAN. The library has recently acquired its own Internet access which will ensure a stable, secure and fast conduit for the development of this project.

Contact with OCLC's Preservation Resources group for scanning services has been initiated and costs have been identified. An additional copy of the microfilm as well as project development expertise will be donated by the State Library. Connection with the University of Michigan's School of Information Science has been established for the purpose of technical and indexing assistance from them available during the project. FineReader OCR software has been identified as the best OCR software currently on the market. Greenstone Digital Library software has been selected for this project, a copy of which will be downloaded and connections pursued with its producers at Waikato University in New Zealand.

The relationship between the UAF's Rasmuson Library Alaska Polar Regions department and Tuzzy Consortium Library will also be further developed with this project. The need for expertise in indexing will be provided by Ronald Inouye and the staff of the Alaska Periodical Index (API). Tuzzy staff will rely on the university for help in determining name authority file and descriptors as well as for subject heading consistency. Project staff will provide MARC records to the API of the approximately 3,000 most important front-page articles over the course of the project life. Making this data available to the API is important as larger plans are being developed for an Alaska Virtual Library project. Tuzzy Library will be well positioned to assist in the coordination of

planning for developing future electronic resources of cultural, educational and historical significance.

### ***Training***

The need for training is crucial to the success of this project. Opportunities for formal training and ongoing mentoring have been designed into the project so that staff can achieve project goals. During the first quarter of the project training in indexing techniques will be completed by the archival technician at UAF. A project consultant will be brought to Barrow to train the technician in the use of appropriate technology and will develop documentation for the processes involved to ensure project continuity. Follow-up visits are scheduled in order for the consultant to mentor staff and monitor quality.

### ***Workflow***

This project represents the second of several phases required to digitize and index the Tundra Times archives and disseminate them widely via the Internet. The Tundra Times newspaper microfilm consists of approximately 17,000 images on 35mm reels. A clean copy of the microfilm will be contributed to the project by the Alaska State Library. This copy will be sent to OCLC's Preservation Resources division currently in Bethlehem, Pennsylvania.

While the microfilm is being scanned, an archival technician will be hired and sent to Fairbanks for two weeks to train in indexing techniques at the university. After the training is completed, a consultant will be brought to Barrow to help set up the OCR software, train the technician in its use and begin the process of developing documentation. Tests and run times will be conducted to establish benchmarks for production. Experts have determined that a normal person can correct OCR scanned documents for about three hours per day. The Library intends to utilize this standard to develop project staffing work loads. Other ongoing project activities will include Web page development with the assistance of Iñisaġvik College IS support staff, MARC record preparation for the API and photograph database enhancement. At the end of each month's work, the corrected data will be processed through the Greenstone software to produce the full text index and any other indexes desired. Each month new data will be integrated into the existing database.

### ***Digitizing***

Following the standards promulgated by the National Archives and Records Administration and their Guidelines for Digitizing and Archival Materials for Electronic Access, microfilm images will be scanned as 8-bit grayscale images at a spatial resolution of 500 dots per inch (dpi) and saved in uncompressed tagged image file format (TIFF). The TIFF image will be saved to compact disk. File sizes generated for each image are estimated to be in the 6-8 megabyte range. JPEG images will be generated from these for use on the Internet.

### ***OCR and Indexing***

ABBYY's FineReader 6.0 Corporate Edition will be used for optical character recognition software because of its versatility and proven record particularly with non-Latin fonts and ease of use. Processing will be done in-house. It has been estimated that a qualified, experienced person can correct approximately 500 pages per month. For this reason, work-study students will be hired through Iñisaġvik College during the school year to work on the project. Students from the University of Michigan's School of Information's Cultural Heritage Preservation Institute will participate in the process during the summer.

Once a portion of the images are corrected, a full text database will be compiled using the Greenstone suite of software. This software creates a structured digital library with a powerful search and retrieval engine. This database will be made accessible through the project web site with links to the full text of the articles and to the scanned page image. Additionally, full MARC records from the 3,000 most important articles published in the newspaper will be created for the Alaska Periodicals Index. By the beginning of the funding period, this database, currently on a VTLS database, will have been converted to a SIRSI Unicorn database. Unicorn presents many exciting possibilities which Tuzzy Consortium Library will be able to explore as a partner in that project.

### ***Processing Time***

Consultations with indexing experts at Rasmuson Library and with Alu Like in Hawaii where a similar project is being conducted, have led project staff to conclude that the goal of indexing the Tundra Times and publishing it to the Web is achievable in the project's two-year timeline. However, research into OCR correction activates and indexing indicates that it is a lengthy and rather intense activity. It is estimated that one person could not accomplish this project without assistance. Therefore, other measures have been arranged to guarantee additional assistance on the project. The College has indicated that two work-study positions will be made available each semester to assist in this process. Additional students from the University of Michigan's School of Information will be made available to work on the project during the summer. After staff have become familiar with the equipment, it is estimated that image processing will take a maximum of 30 minutes, including all aspects of handling from filing to publishing on the Web. A benchmark test, conducted once equipment is assembled in the workroom and staff are trained, will further refine this figure. It is assumed that as staff become familiar with the activities, processing time per page will decrease.

### ***Follow-up Activities***

With the formal completion of the project several components will continue. The IHC has expressed an interest in compiling the editorials of Howard Rock. The North Slope Borough School District will use the articles to develop curriculum material and an Alaska Native history. Additional MARC records will be added to the API index. Additional work on the photograph database started previous to this project will continue to completion with the aid of the full-text database.

### **B.3. Action Steps and Activities**

The following action steps have been carefully developed. We foresee no problem in their execution.

#### ***Preceding Quarter***

- 1) Acquire and analyze Greenstone manuals –Archivist, IS staff and Technician
- 2) Training Web design and XML - Archivist with the College instructors
- 3) Mount project web page on server - Archivist and IS staff
- 4) Conduct paper newspaper inventory – Coordinator

#### ***Quarter 1***

- 1) Hire technician and finalize consultant contract - Project Director
- 2) Attend training at Rasmuson Library (UAF) – Technician
- 3) Install and test software - Iñisaġvik College IS staff
- 4) Acquire duplicate microfilm from State Library – Project Director
- 5) Complete pre-implementation activities - Consultant and staff
  - (a) continue training staff in use of hardware and software – IS staff
  - (b) establish and document scanning and indexing standards, train staff
  - (c) test workflow and processing time, train staff
  - (d) pilot OCR and indexing of about 50 pages, refine workflow and processing time estimates
  - (e) establish quality control procedures for OCR work and indexing
- 6) Send microfilm to Preservation Resources for scanning.
- 7) Conduct quarterly review-Project Director, staff, consultant, and advisory group

#### ***Quarter 2***

- 1) Fine-tune workflow and processing time estimates based on first quarter evaluation - Consultant and staff
- 2) Begin OCR corrections - Technician
- 3) Conduct follow-up on-site training– Consultant
- 4) Conduct quarterly review - Project Director, staff, consultant, and advisory group

#### ***Quarter 3***

- 1) Continue OCR process and compile first index file - Technician
- 2) Revise Web site as needed with introductory pages, graphics, etc. – Technician and IS staff
- 3) Post index to Web - Project Director and staff
- 4) Commence indexing of API records - Technician

- 5) Conduct quarterly review - Project Director, Technician, Consultant, and advisory group

#### ***Quarter 4***

- 1) Continue OCR and indexing - Archivist and Technician
- 2) Publish the database to the Web site – IS staff and Technician
- 3) Begin development of a guide for the collection – Consultant and staff
- 4) Conduct quarterly review - Project Director, Technician, Consultant, and advisory group
- 5) Present project at Alaska Federation of Natives conference – Archivist and Technician

#### ***Quarter 5-7***

- 1) Continue OCR and indexing - Archivist and Technician
- 2) Publish the database to the Web site - Technician
- 3) Conduct quarterly review - Project Director, Technician, Consultant, and advisory group

#### ***Quarter 8***

- 1) Complete guide to the collection – Consultant, Archivist and Technician
- 2) Post final index to the Web - Technician
- 3) Complete final evaluation - Project Director and staff
- 4) Complete final project report and submit to IMLS - Project Director and staff

### **B4. Appropriate Application of Technology**

The hardware and software systems selected for TTIP were chosen as the most appropriate technology because of ease of use, pricing/availability, and fit to the project. The major strategic decision in the selection of both hardware and software was whether the products met computer industry standards or library standards. Additionally, trends in library standards were examined in order to determine suitability for future migrations to advanced platforms and formats.

- Hardware-The College is standardized on Dell IBM-compatible computers, a decision that gives tremendous advantages in pricing, service, and end-user training. Computers selected for the project are fully capable of achieving the required processing speeds and random access memory configurations required of the software selected. The Library staff upgraded to Dell Optiplex GX240 running Microsoft NT in 2002.
- Software-All of the software selected is in wide use and commercially available, lending advantages in terms of end-user training and customer support. ABBYY FineReader is recognized as a leader in OCR software. Its support of Unicode and multilingual capabilities makes it highly suitable to deal with certain Alaska Native characters not found in English. After extensive research, Greenstone Software was selected for similar language handling capabilities. It is extensible and open-source software with a proven track record in libraries world-wide. It has the additional advantage of outputting text to XML based Web pages which is highly desirable. Greenstone is fully documented and produced and supported by the New Zealand Digital Library Project at the University of Waikato.

The College has a fully capable Information Systems staff that currently services and maintains the institution's Web site, network, hardware, and peripherals. Additional technical assistance will be made available through the University of Michigan's School of Information and a paid consultant. Software training in standard applications is available through the College's Computer Applications Department, and a consultant engaged for the project will provide training in the applications selected. The Library's budget, which is administered by the Project Director, will allow for initial purchase of the software proposed, as well as its periodic upgrade, and the College's IS budget is adequate to allow for hardware upgrades when needed.

### **B.5. Scope of Project that Creates Positive Change**

A major focus of TTIP is staff training and systems development so that the Library is positioned to continue work on the Tundra Times collection. Mentoring from consultants and staff at UAF's Rasmuson Library will assure that Library staff achieve a standard of excellence that can be continued after the grant period and position the Library to better provide services to its clientele. Providing a collection of the nature of the Tundra Times to the Native communities of Alaska as well as outside researchers will help establish the Library as an example to other rural libraries and encourage them to take on challenging projects.

## **B.6. Maintenance of Effort**

The Library looks forward to maintaining the Tundra Times collection as a permanent part of its Alaskan collection. Because Tundra Times founder Howard Rock was born and raised in Point Hope, an NSB community, the Library has a strong commitment to sustaining his life work. TTIP has been designed to use local resources and build local capacity so that the project will fit seamlessly into the College's operations when grant funding expires. The Archivist, a full-time, permanent employee, will manage and maintain the collection in the Library. The Web site (<http://ilisagvik.cc/tuzzy/library/default.htm>) will be maintained by the College's IS staff. UIC, the owner of the Tundra Times archives, is committed to preserving and disseminating its collection, as evidenced by its letter of support.

## **C. Management Plan**

The management plan for this project has been developed along the lines of similar successful projects managed by the Library and Ilisaġvik College. The plan ensures input, cooperation and sharing with other organizations interested in the cultural outcomes expressed in this project. The plan ensures that practices and standards for indexing and Web page development are upheld.

### **C.1. Oversight for Action Steps and Activities**

The Project Director, David Ongley, will devote approximately 10 percent of his time to providing oversight of the project (including assisting with questions that arise about indexing). Spending approximately 20 percent of her time on TTIP, the Archivist will supervise activities on a daily basis. After establishing systems and standards during the project's first three months, a consultant will return to conduct follow-up training during the second quarter. On a weekly and monthly basis, she will continue to perform spot checks on the quality of the digitized files and indexed records via the Internet. The Oversight Committee will evaluate TTIP every quarter. This combination of systems development, training, and continuous quality control will help keep completion of the action steps and activities to the highest standards.

### **C.2. Applicant Capability to Implement the Project**

The Library has been the recipient of four major grant awards. Included in these: Tumikut: Pathways to Literacy, a Library Research and Demonstration Project (Department of Education) which led to the production of educational materials in the Iñupiaq language, IMLS Enhancement grants in 1998 and 2000 for a Catalog Conversion and Training Project and its current Tundra Times Photograph Project. Ilisaġvik College is managing several other major awards, including a Workforce Development Grant from the U.S. Department of Labor (nearly a million dollars annually), a Title III award from U.S. Department of Education (\$1.8 million over 5 years), a National Science Foundation Technological Education Program grant (\$300,000), and an award from the Working Connections Program (\$250,000) - giving it extensive experience in handling grant funds and responding to audit requirements. As a result, the College has the financial and project management expertise to fully implement the project without difficulty.

### **C.3. Availability of Appropriate Personnel, Facilities, Equipment and Supplies**

The project staff and Oversight Committee members are recognized authorities in their fields of expertise. The Iñupiat Heritage Center in which the Library is housed is a state-of-the-art facility. Its climate controls safeguard precious collections, such as the Tundra Times archives. A room set aside for the project is conveniently located close to the storage area. The Library will provide hardware, software, and supplies described above for this project. Provisions have been made to conduct the project according to the highest library and archival standards. All of the pieces are in place to make this project successful.

### **C.4. Financial Planning and Management Experience**

Ilisaġvik College's Division of Business and Finance employs generally accepted accounting principles that meet all standards required for government and/or nonprofit entities. Internal policies and procedures have been established to guide administration of accounts payable, reconciliation of the general ledger, shipping and receiving, encumbrances, payroll, accounts receivable, and purchasing. Great Plains Dynamics Software is used for all accounting needs. Modules include General Ledger, Accounts Payable, Accounts Receivable, Encumbrances, Payroll, Fixed Assets and FRX Report Writer.



The general ledger chart of accounts was designed to comply with reporting standards for institutions of higher education as documented in the Financial Accounting and Reporting Manual for higher education developed by the National Association of College and University Business Officers. The general ledger account structure assures that general fund accounts, grant funds, restricted funds, auxiliary accounts and special revenue are separated according to the type of funding source. For tracking purposes, every grant is assigned a unique identifying number with funds and expenses allocated to that account.

An independent certified public accounting firm conducts an annual audit of all accounting functions in compliance with the standards required for educational and/or nonprofit entities. A financial statement and independent auditor's report are issued as a result. The accounting firm of Mikunda, Cottrell & Company currently provides these services to Iñsaḡvik College.

#### **D. Personnel**

The Project Team (see attached resumes) will be headed by the Library Director, David Ongley, who will serve as the Project Director. Archivist, Fannie Akpik, who is a recognized expert in Iñupiat language and culture, will oversee the day to day operation of the project. She has worked with scanners and computers for many years in her capacity as assistant professor of Iñupiat Studies at Iñsaḡvik College. She has training in web site development and multimedia projects. She effectively provides leadership of the photograph digitizing project currently underway. The project technician will perform most of the OCR activities as well as prepare the indexing. (Job description. Attachment D). Consultants for this project will be selected for their expertise in indexing, database management and computer programming. Local experts Brower, Savok and Harcharek as well as UAF professor Inouye will serve on the Oversight Committee and contribute expertise in project management, indexing and cultural affairs.

- David Ongley, Director, Tuzzy Consortium Library Qualifications: Mr. Ongley has an ALA accredited M.L.S. and 20 years experience in the provision of professional library services. Experience: In the last 6 years, he has administered 16 grants totaling nearly a million dollars. Mr. Ongley will devote 10% of his time to the project.
- Fannie Akpik, Archivist, Tuzzy Consortium Library Qualifications: Ms. Akpik is a cultural expert who has been extensively involved with revitalizing Iñupiaq language and culture in the NSB. Experience: Ms. Akpik has served as the Chair of the Iñupiaq Language Teacher Education Program at the College for the last four years. Devoting 20% of her time to TTIP, Ms. Akpik will manage the project on a day-to-day basis.
- Ronald Inouye, Editor, Alaska Periodicals Index, UAF. Qualifications: Mr. Inouye directs the preeminent indexing effort in the state. His involvement is crucial to the successful completion of this project. Experience: Mr. Inouye has been an innovator and leader in a state-wide indexing effort since 1987. He will devote two weeks of his staff time to training the Tuzzy technician and serve in an advisory capacity for the duration of the project which includes 4-6 hours per quarter.
- Ronald Brower, Director, IHC Qualifications: Mr. Brower is a recognized expert in Iñupiaq art, culture, and language. Experience: He was on the Board of Directors of the Tundra Times from 1992 to 1998 which makes him a valuable resource for the project. As the Director of the museum housed in the IHC, Mr. Brower is currently mounting an exhibit to showcase Howard Rock and the Tundra Times. He is planning to compile a book of the writings of Rock once the newspaper articles are available. Serving in an advisory capacity, he will devote 4-6 hours per quarter to TTIP.
- Christopher Savok, Acting-Liaison, IHLC Qualifications: Mr. Savok is a trained expert in Iñupiaq culture, artifact cataloging and preservation. Experience: The IHLC maintains a database of artifacts and a historic photograph which Mr. Savok helped develop, and now manages. His involvement with the project will lend relevant expertise, and facilitate coordination of their efforts at document preparation and database development. Serving in an advisory capacity, he will devote 4-6 hours per quarter to TTIP.
- Jana Harcharek, Manager, Bilingual/Multicultural Instruction, North Slope Borough School

District Qualifications: Ms Harcharek's office develops curriculum material for the NSBSD that is culturally relevant and grade-level appropriate for Native students. Experience: Recognized cultural expert. As the former IHLC Liaison officer she has developed similar projects and has served in an advisory capacity on several other Tuzzy projects. Serving in an advisory capacity, her will devote 4-6 hours per quarter to TTIP

## **E. Evaluation**

The evaluation process employed for this project will be comprehensive and systematic. A combination of baseline data comparisons during the life of the project and quarterly scrutiny by the Oversight Committee will provide the basis for daily observation, review and, if necessary, redirection by the Archivist and Director.

### **E.1. Baseline Data**

Baseline data collected as soon as the microfilm scan is completed will measure OCR correction time and indexing quality and time. Because project staff must be trained for the project, it is assumed that baseline measurements will need to be reassessed quarterly. It is anticipated that once the project is underway and the indexer becomes comfortable with the systems, indexing quality will increase as indexing times decrease. As the project begins, consulting staff will help the project director conduct a comprehensive assessment of the readiness of the facility, equipment, and staff so that any needed adjustments can be made in the project completion schedule.

### **E.2. Ongoing and Comprehensive Evaluation**

The Oversight Committee composed of local cultural experts Brower and Harcharek, the UAF indexing specialist Inouye, an appointee from UIC, the Archivist and the Project Director will monitor quality, guide development, and work to integrate the project with programs at the IHC, IHLC and UAF. Convening four times a year, the Oversight Committee will be instrumental in conducting a concurrent evaluation of performance to objectives and success in achieving the goal of increasing public access to the Tundra Times collection. The collected baseline data and schedule of completion will guide the committee's assessment of timetables and the project's ability to achieve its six objectives.

### **E.3. Measurement of Outcomes**

The quantifiable measurement of project outcomes in relationship to project objectives will be conducted in an observable manner on an ongoing basis. Several objectives can be measured simply by noting whether or not they have been completed, such as the scanning of the microfilm and availability of an online index. During the course of the project, progress can be measured by such factors as the number of issues digitized, the number of articles indexed, the number of corrections required and the amount of time spent at each of the tasks. A standard "hit counter" on the project Web page will measure usage of the information presented.

The quality of the indexing is of more importance than the quantity, but more difficult to measure. The quality control measures designed into this project will ensure that acceptable standards for indexing are adopted. It is anticipated that the consultant will examine the indexing on monthly basis and find no more than 10% in need of correction either in content or format with an additional expectation that the error rate will decrease throughout the project.

Tuzzy Library is committed to measuring the short term objectives and the long term impact of this project to the North Slope and to other rural libraries. Through training, educational opportunities and experience, library staff will become knowledgeable in advanced library techniques and increase their capacity to provide technical assistance and consultation to other institutions. As such, they will be sought after for their opinions and expertise as other libraries look for leadership in similar projects of their own. This has already begun to happen through the successful work on the photograph digitization project.

After the initial training period is completed, the progress on scanning microfilm and placing the index online will be evaluated on a monthly basis. The compilation of the index will depend on the indexer's ability to increase the speed at which s/he becomes more experienced with the OCR software. This is easily measured by counting the records generated each month. Evaluation of the training will include quarterly staff interviews and self-assessments by project personnel.

Progress toward completing the work discussed above will also form an important measure of the training's success.

Through the community satisfaction survey it should be possible to receive feedback which could lead to future improvements. It is hoped that by providing access to the articles of the Tundra Times to the Iñupiat community of the North Slope and Alaska Natives elsewhere, this project will promote a greater understanding of the events that shaped their lives.

#### **E.4. Community Satisfaction**

A community survey will be conducted among library patrons and through the Web site. Users will be invited to respond to a survey that includes questions on: (a) who they are, e.g. educator, parent, etc., (b) how easily they accessed materials, either in the library or at the Web site, (c) how they intend to use the information they obtained, (d) what related information would be of interest to them and (e) from where they have logged on. This self-report survey will measure satisfaction. In an on-going effort to ensure database user-friendliness, the Library will conduct several usability exercises that the staff will monitor. Users will be given a script to follow, and their ease and success in accomplishing the steps will be rated. Adjustments will be made to screens and instructions based on findings from both the community survey and usability exercise. Responses to the survey will guide dissemination efforts, within the scope and budget of the project.

#### **E.5. Plan for Documenting Final Results**

The following evaluative questions will be answered by the advisory committee in the final report at the end of the project:

- 1) Have the project goals and objectives been successfully completed?
- 2) What issues emerged from the project? What issues need additional attention after the project ends?
- 3) Were any techniques developed that can assist other libraries, especially small libraries in remote locations, with similar projects?
- 4) What factors promoted training success? What obstacles had to be overcome?
- 5) In what ways did the project strengthen community partnerships?
- 6) How successful was the Web site in reaching a regional and national audience?
- 7) How will the findings from this project affect future projects at the Library?
- 8) What unexpected results emerged?

### **F. Model Project**

TTIP will employ specialized off-the-shelf technology that is commercially available. The project is unique in that a small, very remote library that serves an indigenous population is undertaking it. Major research facilities and state libraries have long usurped data from other cultures and profited in so doing without necessarily collaborating with or returning anything to the people from which the data came. The Library hopes to continue to reverse this trend by demonstrating that a small library can undertake a major project and successfully carry it through to completion to benefit those it serves.

#### **F.1. Community Service**

Like other libraries serving Native Americans, the Library is building a rich archive of materials related to its primary patrons but has limited resources with which to support their broad use. Despite this obstacle, Library staff are committed to conducting the project themselves. They believe that they are ideally suited for this purpose because they bring to it an understanding of the historical, cultural, and political forces that surrounded the Tundra Times during its 35-years of publication. TTIP will be a model for improving service to patrons in other Native American libraries, especially those found in remote locations, which have an opportunity to preserve unique historical documentation but must train staff and work within limited resources to do so.

#### **F.2. Documentation of Results**

The most obvious form of documentation of the results of TTIP will be the project description on the World Wide Web. A page detailing the project and updating the progress will be maintained from the outset. If funded, this proposal will be posted to it. It is also planned that a paper will be written for publication in newsletters and other periodicals that will review how the project achieved its goals. A PowerPoint presentation will be developed so that presentations at

conferences and meetings can be easily accomplished.

### **F.3. Dissemination**

Promotions for the TTIP will be widely disseminated through a variety of media. It will be available to anyone in the world with an Internet connection. Furthermore, the staff of the Library through the following means will promote it:

- An interactive Web site on the World Wide Web.
- A collection available to the public at Tuzzy Consortium Library in Barrow, Alaska.
- Press releases to print and electronic media throughout Alaska
- Presentations at professional meetings, such as those held by the Alaska Library Association, the American Library Association, the American Indian Library Association, the International Indigenous Librarians Forum, the Polar Libraries' Colloquy and the Alaska Federation of Natives.

The Library expects to break new ground with this project as it implements a high-tech effort more than 500 miles from the closest urban center. Lessons to be shared will focus on effective models for training, project management, and quality control of this type of technology-rich endeavor within a small library serving a predominantly indigenous population. Venues for sharing this information include the statewide network of library professionals through their annual meetings, and national conferences, such as that conducted by the American Library Association. David Ongley, the Project Director and Director of the Library, is an active participant in these networks. TTIP's role in establishing a trend that will reverse the outflow of cultural treasures from the arctic makes it a central activity for the Library, and one about which the Project Director has a commitment to report to the Native library community.

### **G. Contributions and Cost Sharing Commitment**

The Tuzzy Consortium Library and its parent organization, Iḷisaḡvik College, are committed to supporting the costs associated with this project. As such, the Library Director will commit 10% of his time to the project and the Archivist 20% of her time. Although this exceeds the percentage of cost-sharing required, it is felt by the administration that this project is of great importance and a desirable outcome is anticipated. Cash matches will be provided by the Iḷupiat Heritage Center for the scanning of the microfilm and by the Alaska State Library which will donate a complete clean negative copy of the microfilm from the master copy.